

Methow River Watershed -WRIA 48

Low instream flows and de-watering occur naturally in some reaches as a result of climatic and geological conditions within the Methow River Basin. De-watering of the main stem is known to be a natural occurrence in the vicinity of Robinson Creek during late summer and early fall annually. The extent to which water diversions affect main stem flows is not well documented.

Early Winters Creek has two diversions diverting up to 15 cfs of surface flow, which can have a significant impact on rearing habitat, adult steelhead and chinook passage, and contributes to low flows in the lower 1.3 miles of the creek.

There are four diversions within the annually dewatered reach of the upper Methow River (above RM 61), including a significant diversion of 1.8 cfs on Goat Creek. It is likely that this diversion contributes to earlier dewatering of the main stem during late summer months than would otherwise occur.

There are three identified water diversions on Wolf Creek. The lower 0.5 miles of the stream dewater during most years after late July. Low flow hinders migration of spring chinook and bull trout and results in loss of rearing habitat and stranding of salmon and steelhead juveniles.

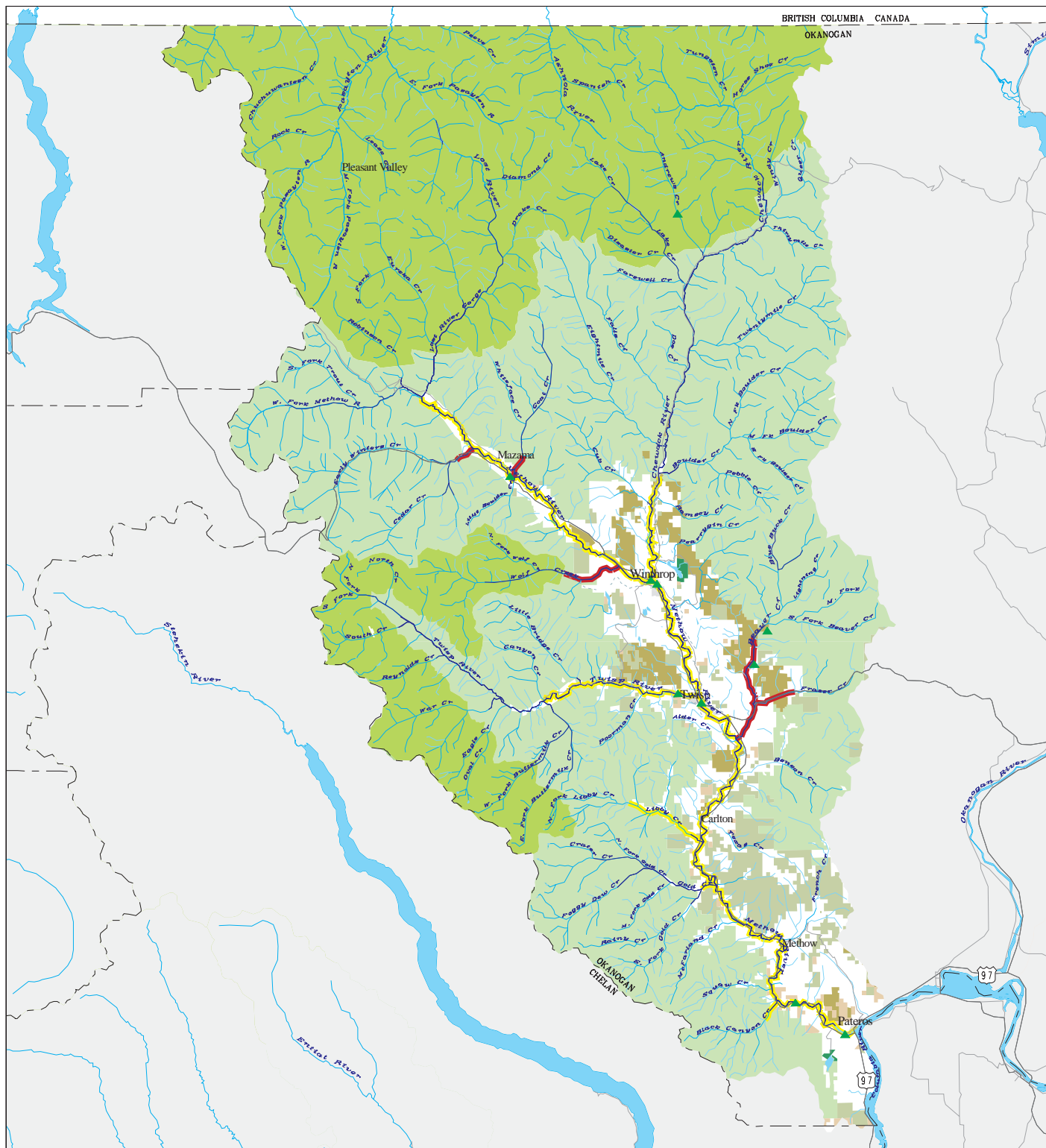
There are a total of five surface water diversions in the Chewuch River sub-basin, two of which are located on Eight Mile Creek. While water diversions may not be the most limiting factor to salmonid production in this basin, they contribute to lost rearing habitat and production potential in the Chewuch and Methow Rivers.

Rearing habitat is potentially limiting in the middle-main stem of the Methow River from surface diversions. Diversions are proportionally the highest during September during most years. Acquisitions in the main stem are not considered to be of highest priority due to the volume of water necessary to effect measurable change in rearing habitat. Tributary acquisitions may provide incremental increases in instream flow in the mainstem.

There are numerous surface diversions in Beaver Creek and water use exceeds flow during late summer and early fall in most years. Due to the number of diversions present, there may be significant opportunity to acquire water for instream flows in this sub-basin.

There are also diversions which contribute to low flows on Gold, Libby, and Black Canyon Creeks which contribute to loss of rearing habitat and create fish passage barriers. Diversions in Libby Creek may exceed summer base flows and eliminate potential rearing habitat.

The Twisp River is listed on the 303(d) list for temperature and instream flow deficiencies. The Methow Valley Irrigation District (MVID) diverts 24.6cfs from the Twisp River, about 46 percent of the mean flow in September. There are a total of seven surface diversions from RM 3.9 to the mouth. Low instream flows limit both fish passage and rearing habitat for salmonids. Acquisition should be focused on restoring flows up to approximately RM 4.



Stream Flow Prioritization: Methow WRIA 48

Water Resources Program



WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

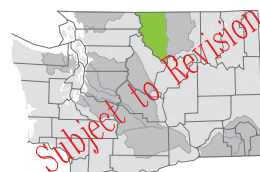
GIS Technical Services
12/13/02
sfp48-mpla

- US Forest Service
- US Wildlife Refuge
- US Parks/Recreation
- USFS Wilderness Area
- Bureau of Land Management
- US Dept. of Defense/Energy
- Wa. Dept. of Fish & Wildlife
- Wa. Dept. of Natural Resources
- State School/Hospital/Prison
- Wa. Parks & Recreation

- City/County Watershed/Park
- Tribal Lands
- Incorporated City
- USGS Stream Flow Gage
- Ecology Stream Flow Gage
- Water Right Purchase



- Low priority stream
- Medium priority stream
- High priority stream
- Salmon/Bull Trout Spawning/Rearing area
- Other streams
- Canal/ditch/pipe
- County
- Highway
- Local Paved Roads



WDNR/Ecology - Major Public Lands 2002 100k
WDFW/Ecology - Hydrography, 2000 100k
Ecology - WRIA, 2002 24K
WDOT - Transportation, 2001 24K
WDFW - Stream Flow Prioritization 2002
WDFW - Spawning/Rearing Areas 2002 100k
USGS/Ecology - Stream Gages 1:100k